



Material Safety data sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1-1. Product identifiers

Product name: AUT-TGF β 2-BMTS

Product number: UBP-ATF-1

Brand: UbiProtein, Corp.

1-2. Recommended use of the chemical and restrictions on use

Identified uses: For R&D, Laboratory chemicals, Cosmetic ingredients

It can not be used for pharmaceutical, household, and other purposes.

1-3. Details of the supplier of the safety data sheet

Company: UbiProtein Corp.

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SECTION 2: Harzards identification

2-1. GHS classification

Not a hazardous substance of mixture according to the Globally Harmonized System (GHS).

2-2. GHS-Labeling

Not a hazardous substance of mixture according to the Globally Harmonized System (GHS).

2-3. Other hazards

None

SECTION 3: Composition/information on ingredients

3-1. Substances

Synonyms: AUT-TGF-Beta 2 linked Biological Materials Transdermal System,

Recombinant human DNA expressed in *E. coli*

INCI name: Methionyl sh-Polypeptide-76-Dodecapeptide

CAS-No.: None

No components need to be disclosed according to the applicable regulations.

SECTION 4: FIRST AID MEASURES

4-1. Description of first aid measures

When you get into your eyes

As a precaution, rinse both eyes with running water.

Skin contact

Rinse thoroughly with soap and water.

When inhaled

If swallowed, move person to a well-ventilated place. If not breathing, give artificial respiration.

When ingested

First, rinse your mouth with water. Never give anything to an unconscious person.

4-2. Most important acute symptoms and effects

No data available

4-3. Most important delay symptoms and influences

No data available

4-4. Other physician precautions

No data available

SECTION 5: Firefighting measure

5-1. Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5-2. Specific hazards arising from the chemical

Combustible.

5-3. Protective equipment and precautions to be used when fighting fire

Wear self-contained breathing apparatus if necessary.

SECTION 6: Accidental release measures

6-1. Measures and protective equipment to protect the human body

Avoid dust formation and avoid inhalation of vapor, mist or gas.

6-2. Measures to protect the environment

Do not allow product to enter drains.

6-3. Purification or removal methods

Keep container in a cool, dry place.

SECTION 7: Handling and storage

7-1. Safety Handling tips

Install a suitable exhaust vent where dust is generated.

7-2. Safe storage

Store in a cool, well-ventilated place.

Recommended Storage Temperature -20 ~ 4 °C

SECTION 8: Exposure protection and personal protection

8-1. Management factor

Contains no substances with exposure limit.

8-2. Appropriate engineering management

General industrial hygiene practice.

8-3. Personal protective equipment

Respiratory protection

No respiratory protection is necessary. Use a N95 (US) or P1 (EN 143) dust mask if you need to protect the lungs dust level as desired at any location. Use materials such as respirators as tested and certified substances such as NIOSH (US) or CEN (EU) as specified by the government.

Hand protection

Dealing with gloves. Gloves should be inspected before use. Use proper glove removal techniques (not touching the outer surface of the gloves) to avoid contact with skin when using this product, and dispose of contaminated gloves according to applicable laws and GLP (Good Laboratory Practice) Please dry. The selected protective gloves must comply with the requirements of EU Directive 89/686 / EEC and the EN 374 standard derived therefrom.

Eye protection

Use eye protection devices that have been tested and certified under reasonable governmental standards such as NIOSH (US) or EN166 (EU).

Body protection

Choose the type of protective equipment, the concentration and amount of hazardous substances, and the specific workplace conditions. The type of protective equipment must be selected according to the concentration and amount of dangerous substances in a specific workplace.

Hygiene precautions

Observe general industry hygiene standards.

SECTION 9: Physical and chemical properties

9-1. Physicochemical properties

A. Appearance

Form: liquid (stored in physiological saline)

Color: Colorless

B. Odor: Odorless

C. Odor Threshold:

D. pH: 9.5

E. Melting point: No data available

F. Initial boiling point: No data available

G. Flash point: No data available

H. Evaporation rate: No data available

I. Flammability (solid, gas): No data available

J. Print or explosion: No data available

K. Vapor pressure: No data available

L. Acceptability: No data available

M. Vapor density: No data available

N. Density: No data available

O. n-octanol / water: No data available

P. Auto-ignition temperature: No data available

Q. Decomposition temperature: No data available

R. Dynamic viscosity: No data available.

S. Molecular Weight: reducing condition - about 12 kDa / non-reducing condition - about 24 kDa

9-2. Other safety information

No data available

SECTION 10: Stability and reactivity

10-1. Chemical stability and potential for adverse reactions

Stable under recommended storage conditions

10-2. Possibility of adverse reaction

No data available

10-3. Conditions to avoid

No data available

10-4. Mixed Prohibited Substances

Strong acidity, strong base

10-5. Hazardous substances generated during decomposition

Hazardous decomposition products resulting from fire. The nature of the degradation product is unknown.

Other decomposition products No data available

10-6. Thermal decomposition

No data available

SECTION 11: Toxicity information

11-1. Information on possible routes of exposure

Inhalation - May be harmful if inhaled. May cause respiratory irritation.

Ingestion - May be harmful if swallowed.

Skin - May be absorbed through the skin, may cause skin irritation and may be harmful.

May cause eye-to-eye irritation.

11-2. Delayed, acute, and chronic effects of short-term and long-term exposure

Acute toxicity: No data available

Skin corrosion / irritation: No data available

Serious eye damage / eye irritation: No data available

Respiratory / Skin Sensitization: No data available

Carcinogenicity : No data available

Germ cell mutagenicity: No data available

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Aspiration hazard: No data available

11-3. Numerical measures of toxicity (eg, acute toxicity estimates)

No data available

11-4. Additional Information

RTECS: No data available

SECTION 12: Environmental impact

12-1. Aquatic toxicity

No data available

12-2. Elimination information (persistence and degradability) in the environment

No data available

12-3. Bioaccumulative potential

No data available

12-4. Soil Mobility

No data available

12-5. Other adverse effects

No data available

SECTION 13: Disposal precautions

13-1. Disposal method

Please provide residues and non-regenerated solutions to authorized waste disposal companies.

13-2. Contaminated packaging

Discard the product as it is included.

SECTION 14: Information for transportation

14-1. IMDG

Not dangerous goods

14-2. IATA

Not dangerous goods

14-3. Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION: 15 Regulatory information

15-1. Regulations under the Industrial Safety and Health Act

Harmful Substances to be Authorized - Not relevant

Prohibited to manufacture, etc. Hazardous Substances - Not relevant

Carcinogen - Not relevant

Work environment Measured object harmful factor - not relevant

Harmful factors subject to special medical examination - not relevant

Controlled Substance - Not relevant

15-2. Regulations under the Chemical Substance Control Act

Toxic substance - not relevant

Observation material - not relevant

Restricted Substances - Not relevant

Prohibited Substances - Not relevant

Material to avoid accidents - not relevant

15-3. Regulations under the Dangerous Goods Safety Management Act

Not relevant

15-4. Regulations under the Waste Management Act

Disposal must be in accordance with Article 13 of the Waste Disposal Act.

SECTION 16: Other information

A. Date Created: 2023.08.30

B. Version: 2.0 Revision Date 2024.04.18

C. Further information

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